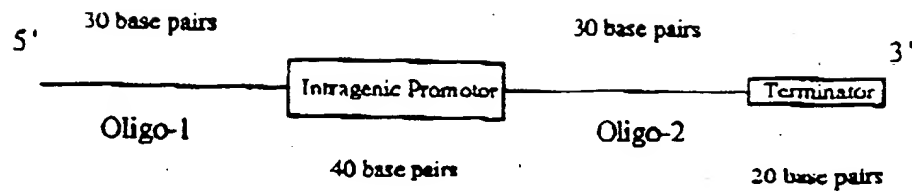
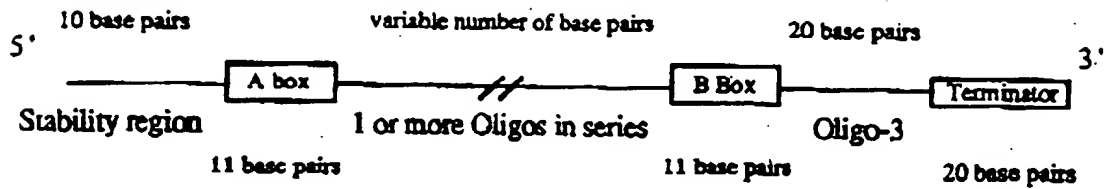


Fig. 1

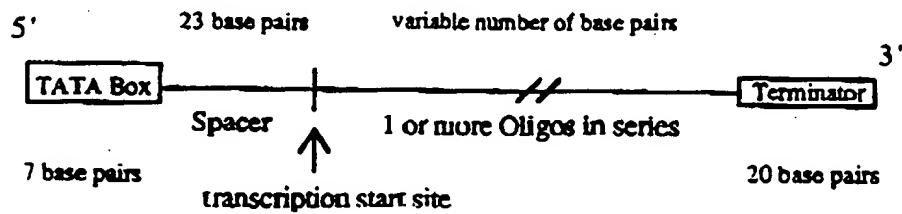
5s rRNA



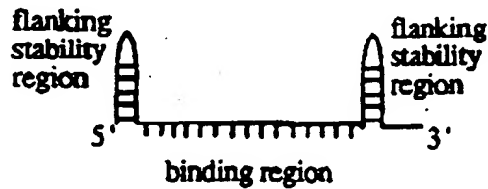
tRNA^{met}



C-myc



sample transcript:



Terminator Sequence: 5' GTCCTAGGCTTTTGCACTTTT 3'
 CAGGATCGAAAACCTGAAAA

↑
 transcription termination site

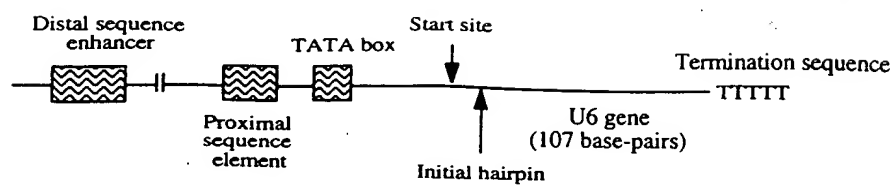
Fig. 2

HER2 Promoter Fragment

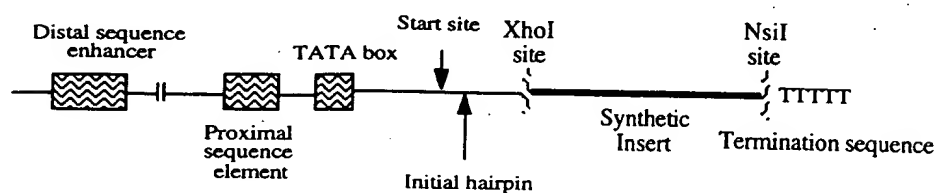
-68 -19
3' TCGTCTTCCTCCTCCACCTCCTCCTCCGACGAACTCCTTCATATTCTTA
5' AGGAGAAGGAGGAGGTGGAGGAGGAGGGCTGCTTGAGGAAGTATAAGAAT
5' UCCUCUCCUCCUCCCCCUCCUCCUCCC CU-rich triplex forming RNA
3' AGGAGAAGGAGGAGGGGGAGGAGGAGGG GA-rich triplex forming RNA

Fig. 3

A. The U6 Small Nuclear RNA Gene



B. The Chimeric Oligonucleotide Producing Gene



C. The U6ON Oligonucleotide

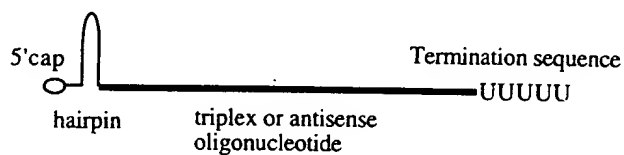
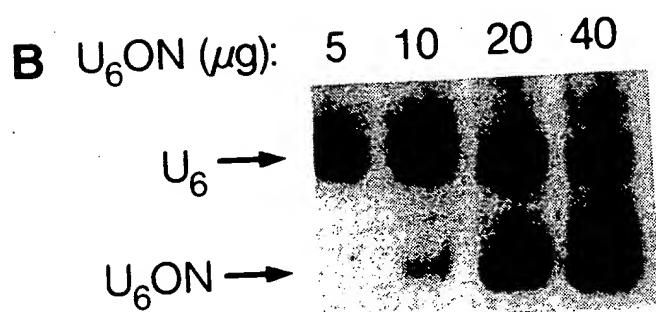
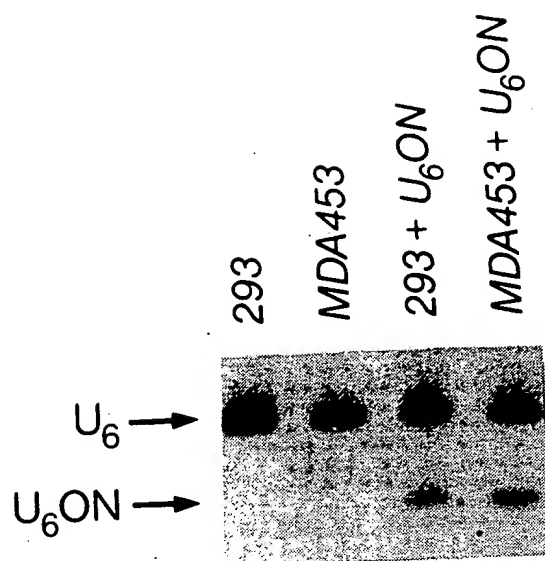


Fig. 4

A



C

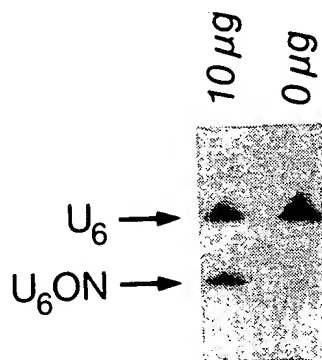


Fig. 5

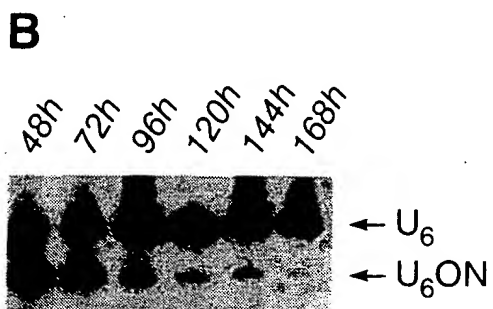
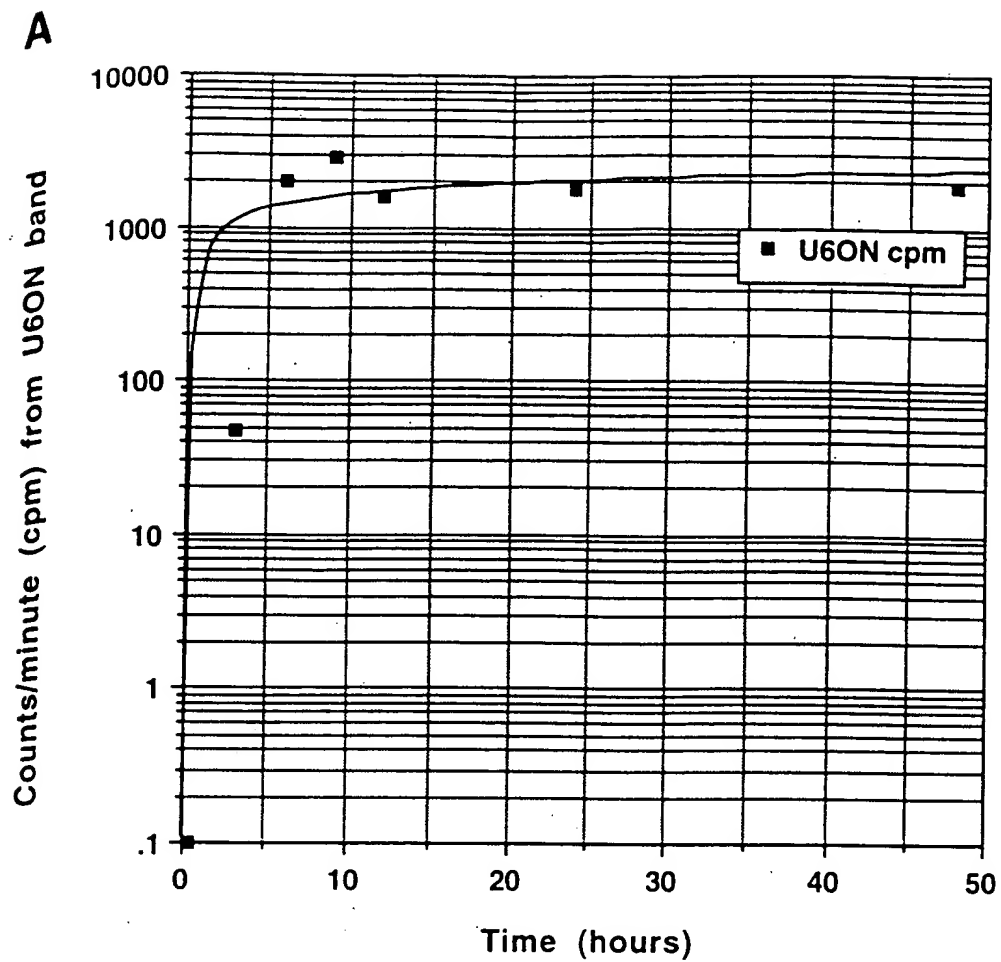


Fig. 6

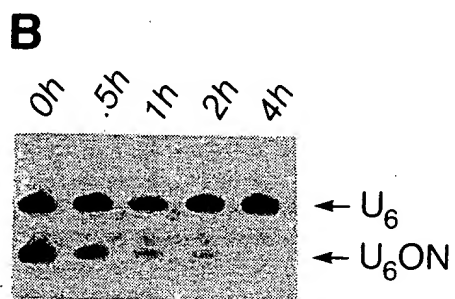
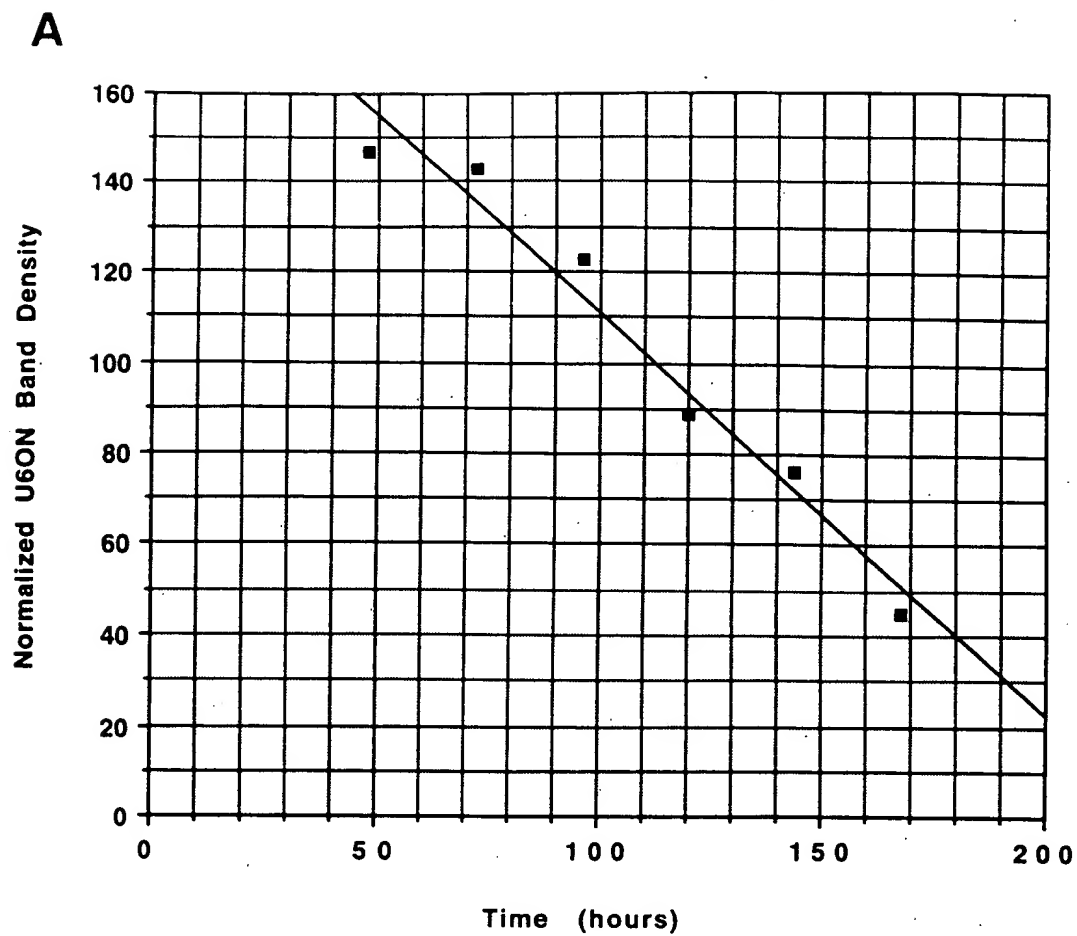


Fig. 7

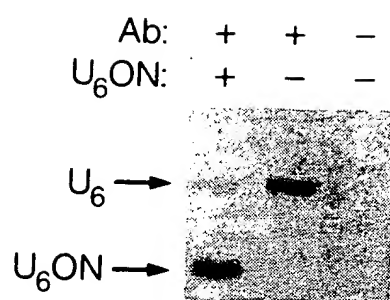


Fig. 8

A

```

      u c
      u  g
      CG
      GC
      UA
      CG
      GC
      UA20
1 GCAUAUccu:CGaccucccuucccuucccuucccCUUC::Cu c
      UAUAccuuGC:::GAAGuacu a
      U
      U80
      U
      U
      U6CTcon energy = -12.72 kcal
      U        (U6ON energy = -12.46 kcal)
  
```

```

      20
1 GuGcuCGCUUCg:GCAgCACAUau::CCuCGaC::AUGa g c
      C:CuuGCGAAGuaCGUaGUGUAagaacGG:GC:GgacUACu a
      A
      U
      A80
      UUUUU
      U6AS energy = -30.83 kcal
      (mU6 energy = -26.48 kcal)
  
```

B

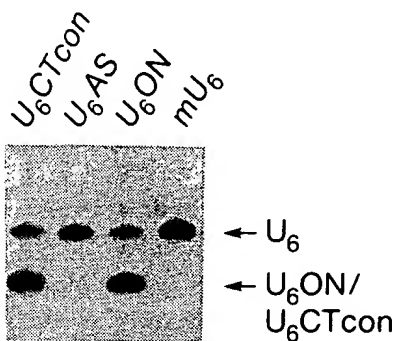


Fig. 9

HER2 Promoter Map and Triplex RNA Oligonucleotide

Triplex RNA oligonucleotide

-77 5' UCCUCUCCUCCUCCCCUCCUCCUCC 3' -20
5' CCCAATCACAGGAGAAGGAGGAGGTGGAGGAGGAGGGCTGCTTGAGGAAGTATAAGAA 3'
GGGTTAGTGTCTCTTCCTCCTCCACCTCCTCCTCCCGACGAACCTCCTTCATATTCTT

CAAT
box

ets- TATA
element box

Fig. 10

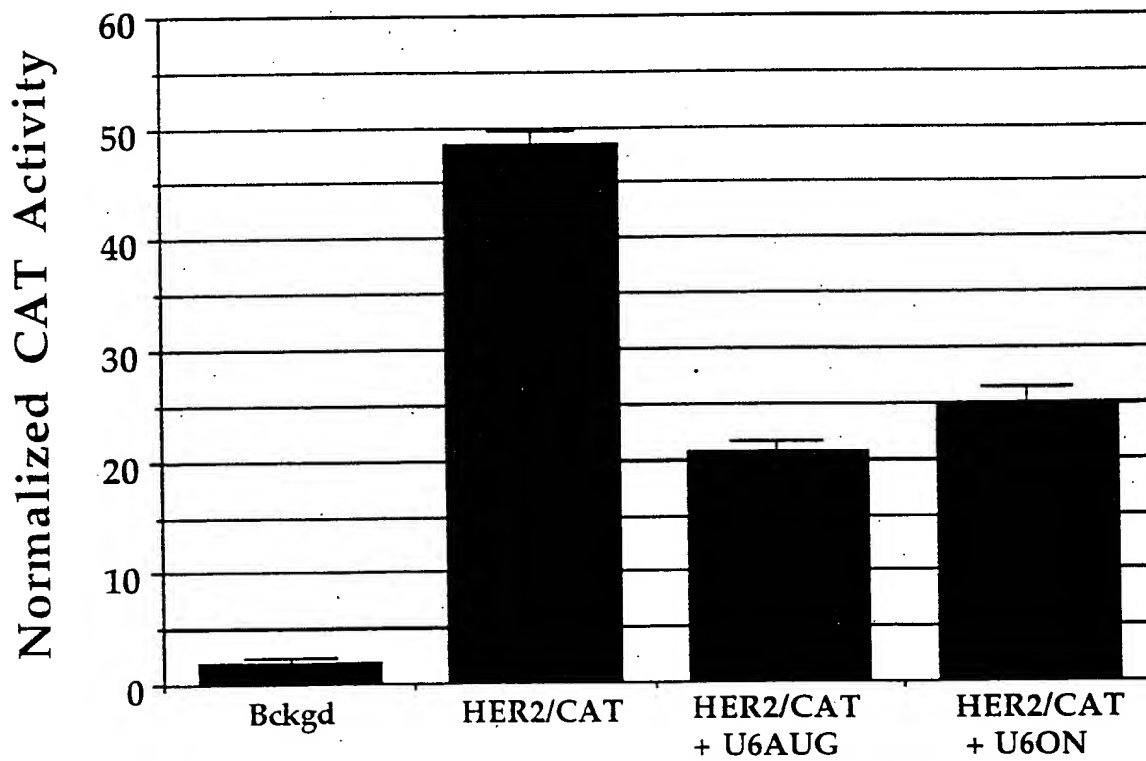
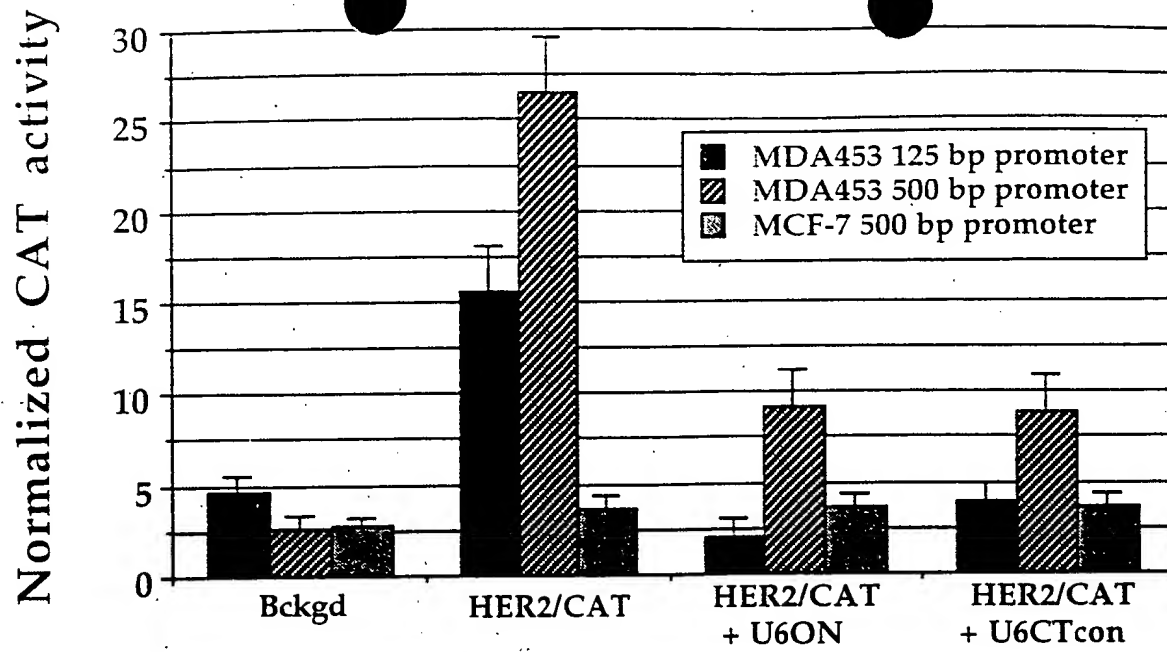


Fig. 11

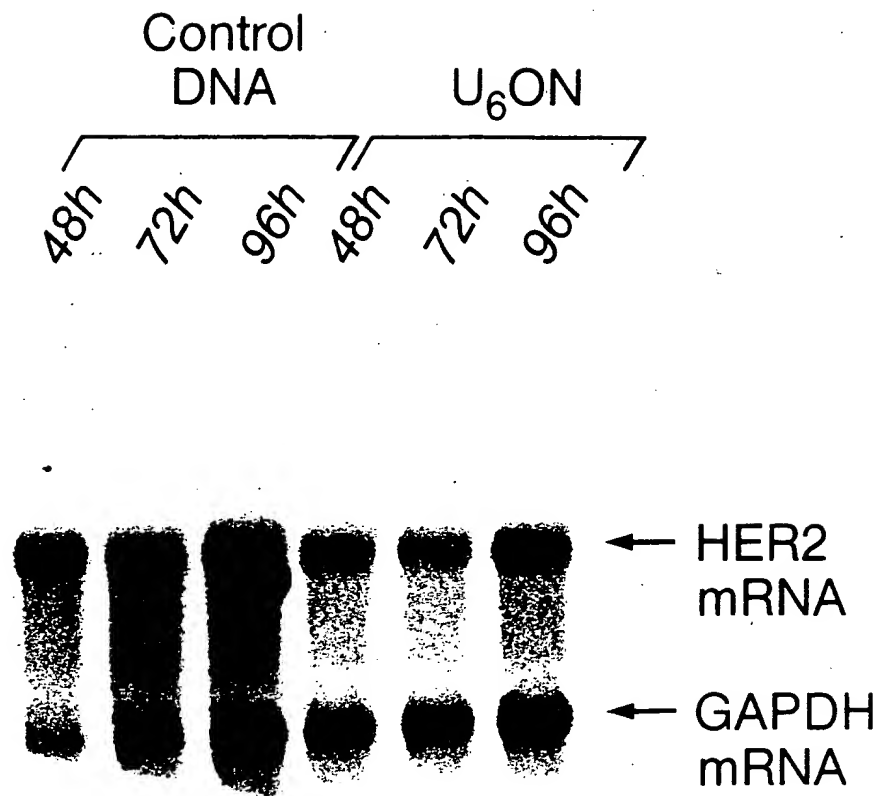


Fig. 12A

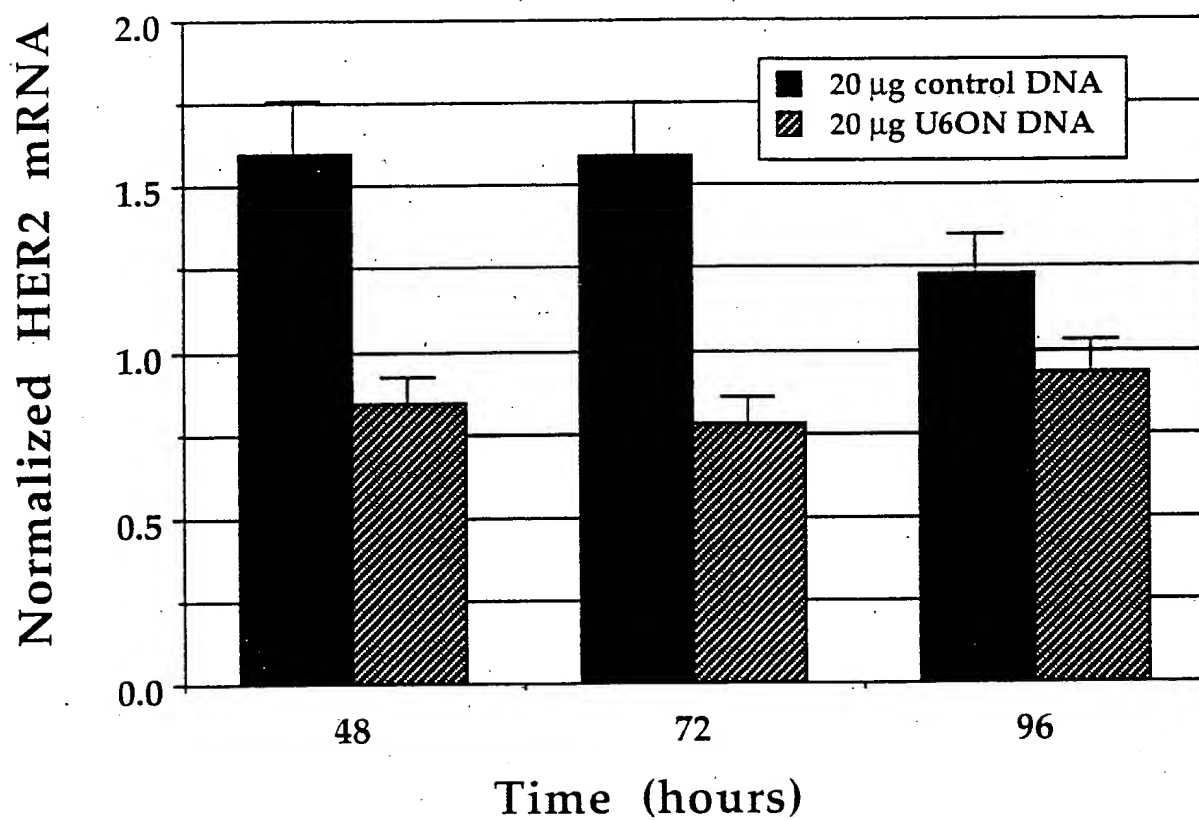


Fig. 12B

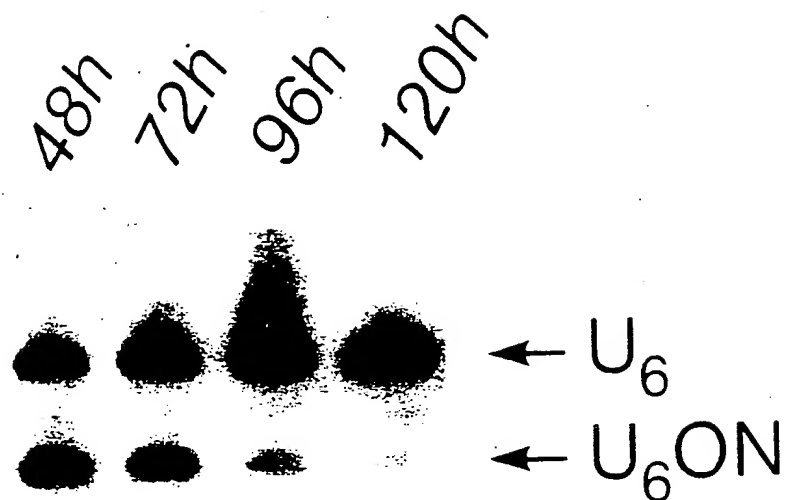


Fig. 12C

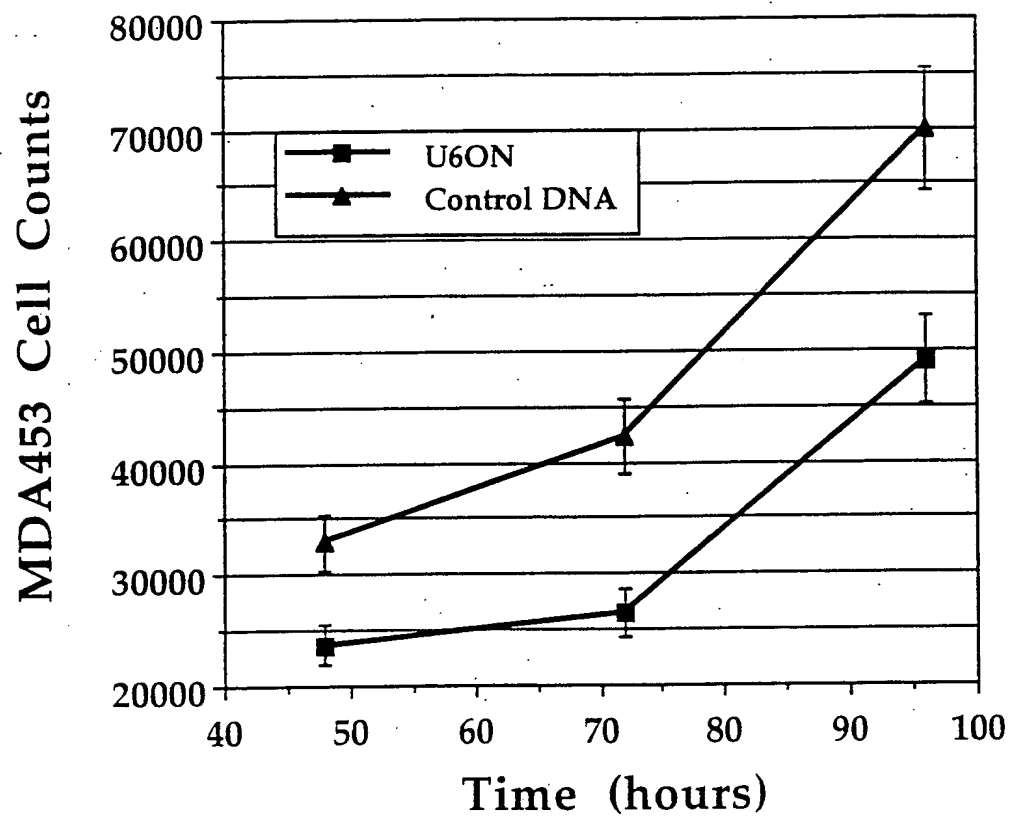
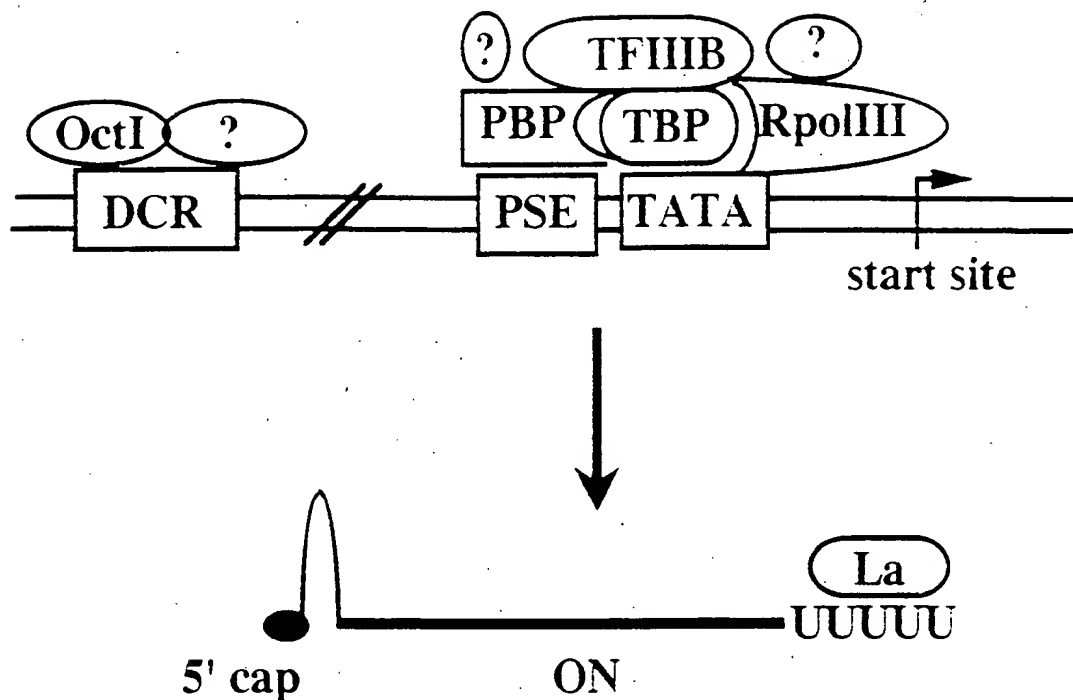


Fig. 12D



Possible Factors in Limiting Supply:

RNA polymerase III (RpolIII)

TFIIB containing the TATA Binding Protein (TBP)

Proximal Sequence Element Binding Protein (PBP)

Upstream enhancers (OctI, ?)

Other uncharacterized transcriptional factors (?)

5' capping enzyme, co-factors

Lupus associated antigen (La)

Fig. 13

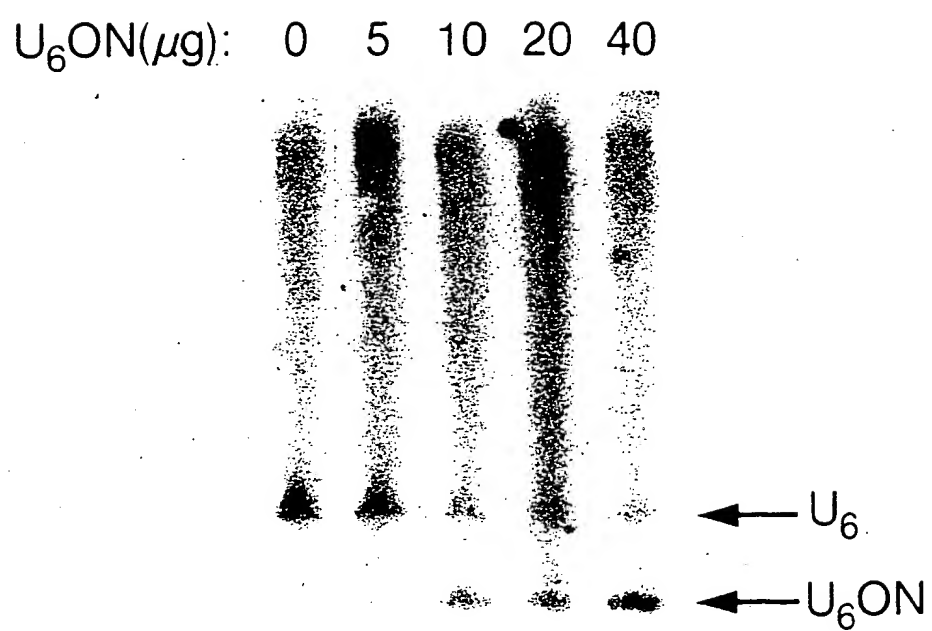


Fig. 14A

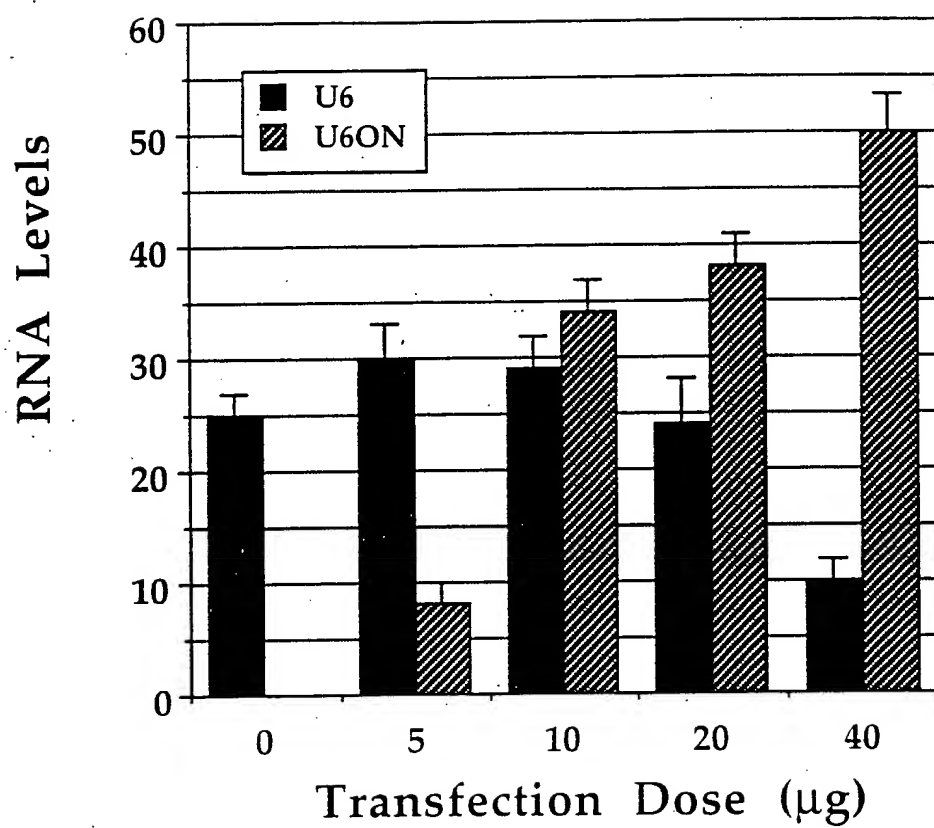


Fig. 14B

Fig. 15

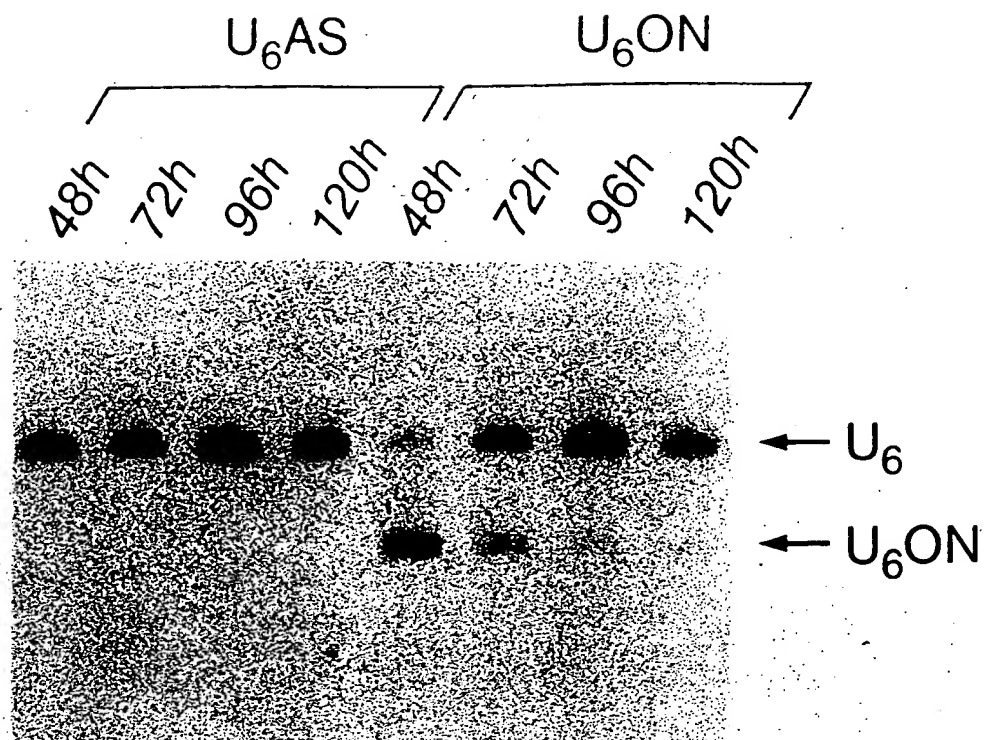
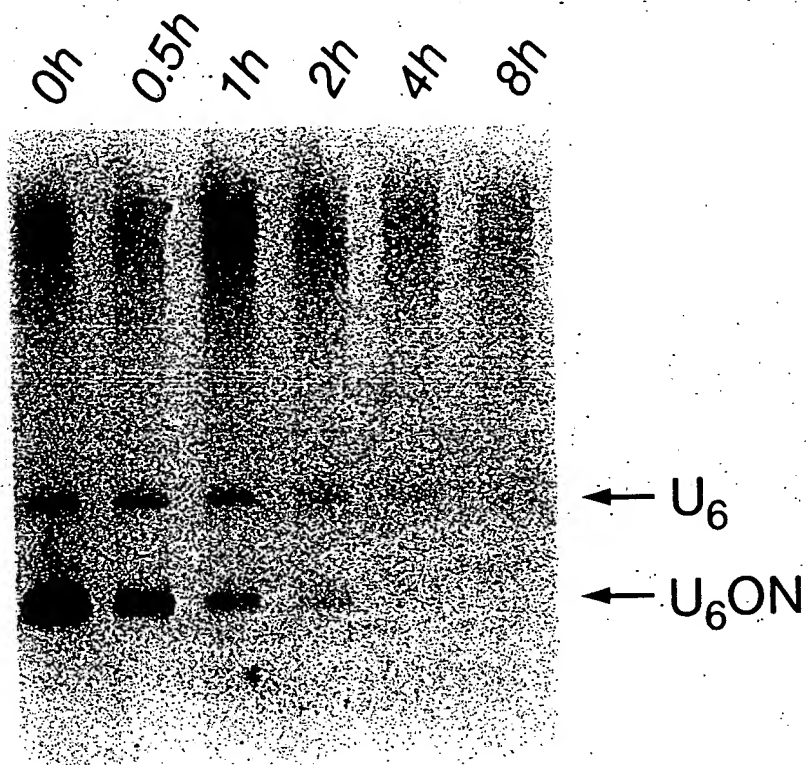


Fig. 16



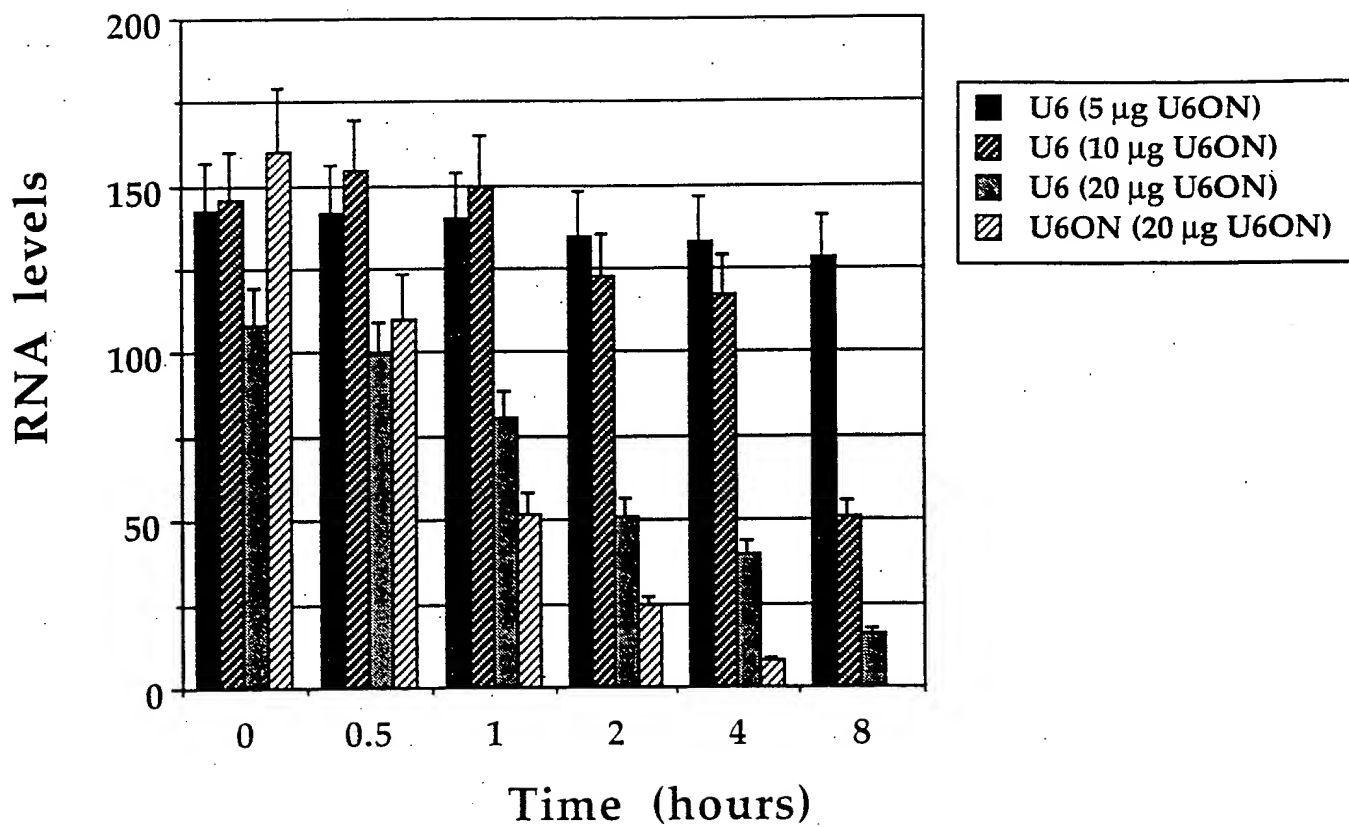
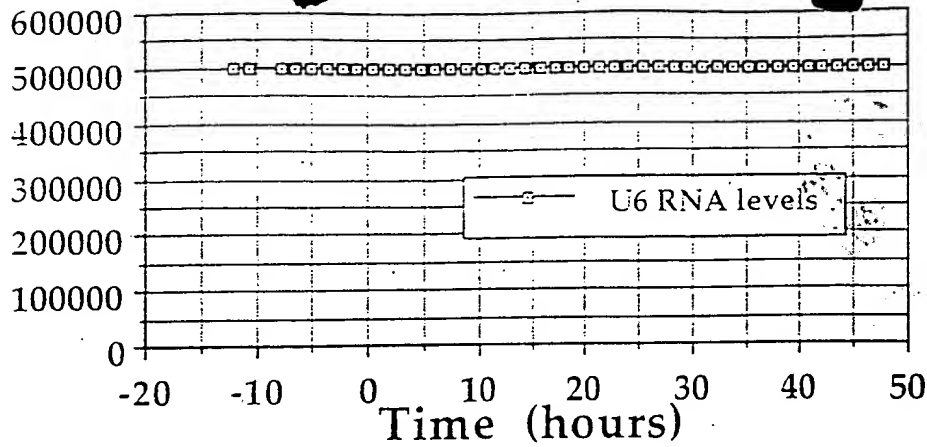
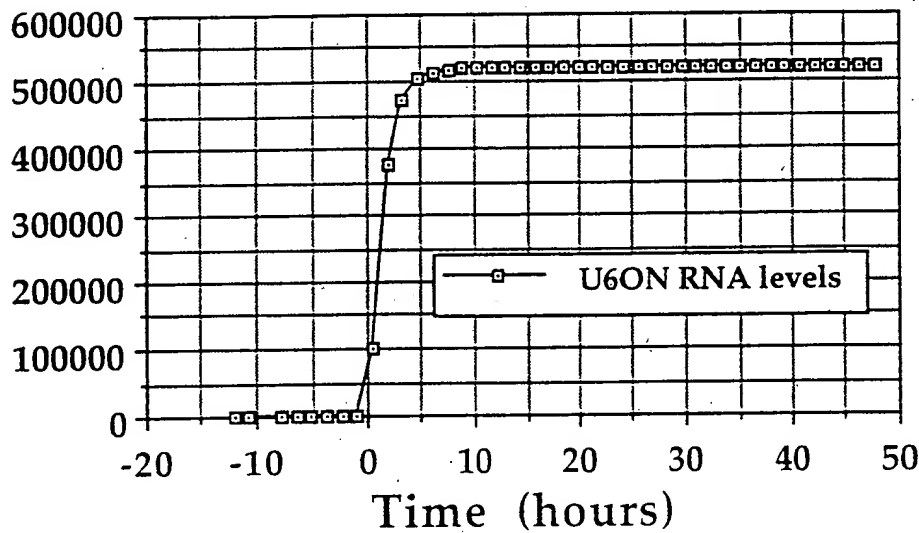


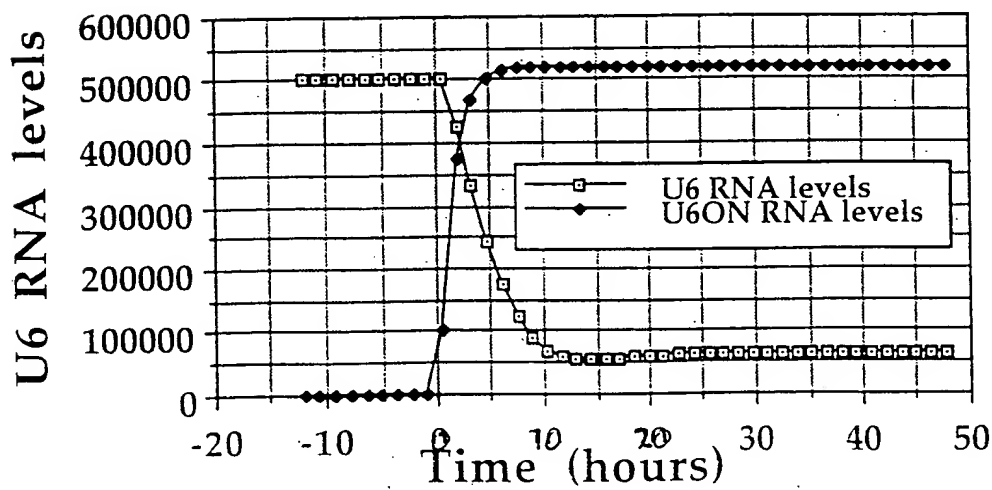
Fig. 17

Estimated RNA lev
(copies/cell)

A

Estimated RNA levels
(copies/cell)

B



C

Fig. 18

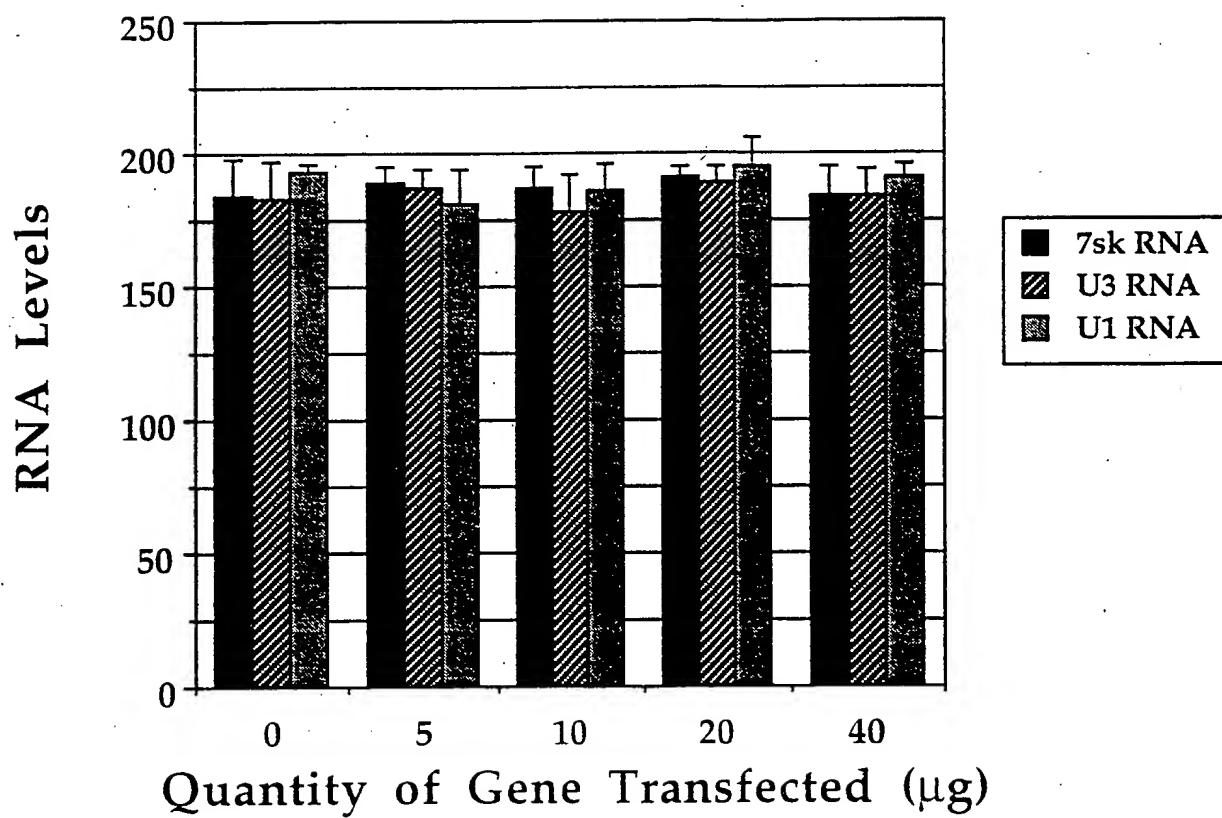


Fig. 19

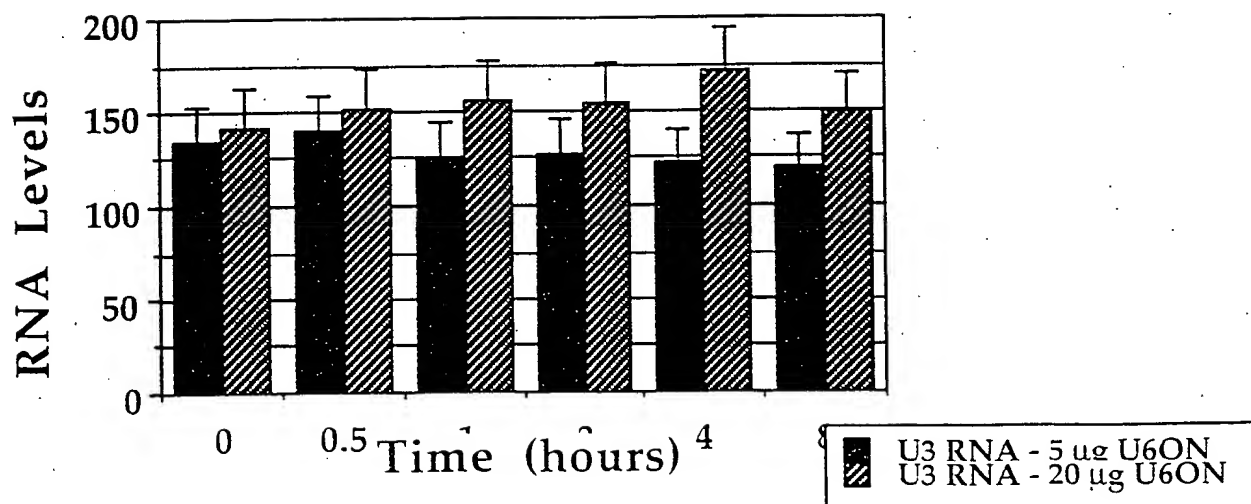
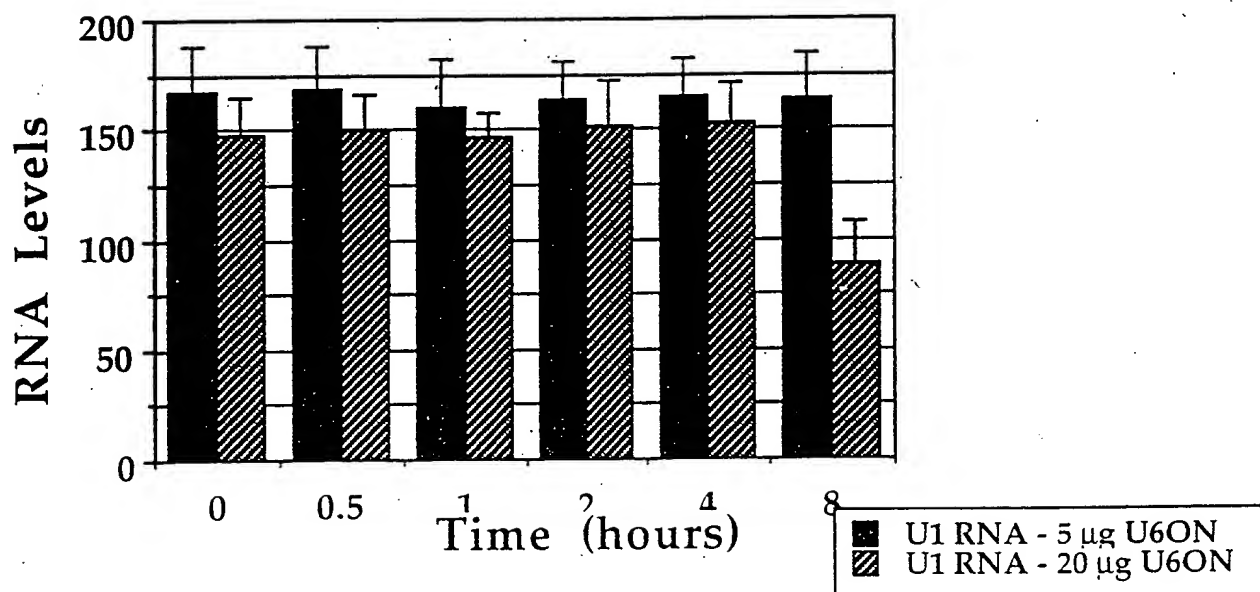
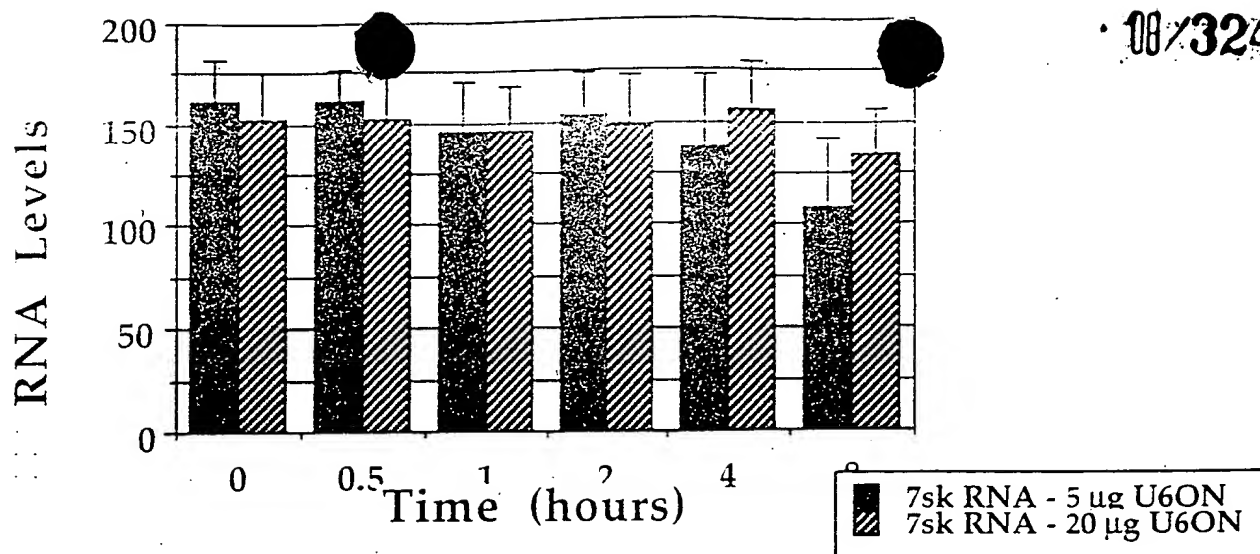


Fig. 20

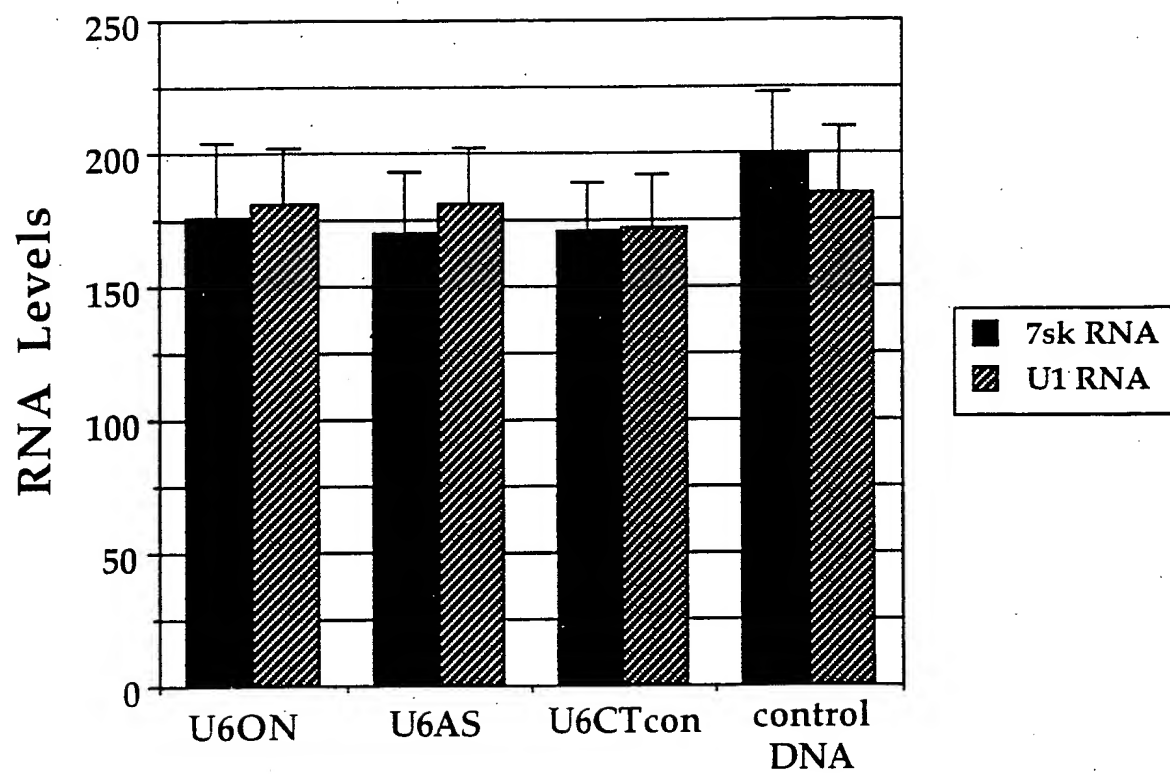


Fig. 21

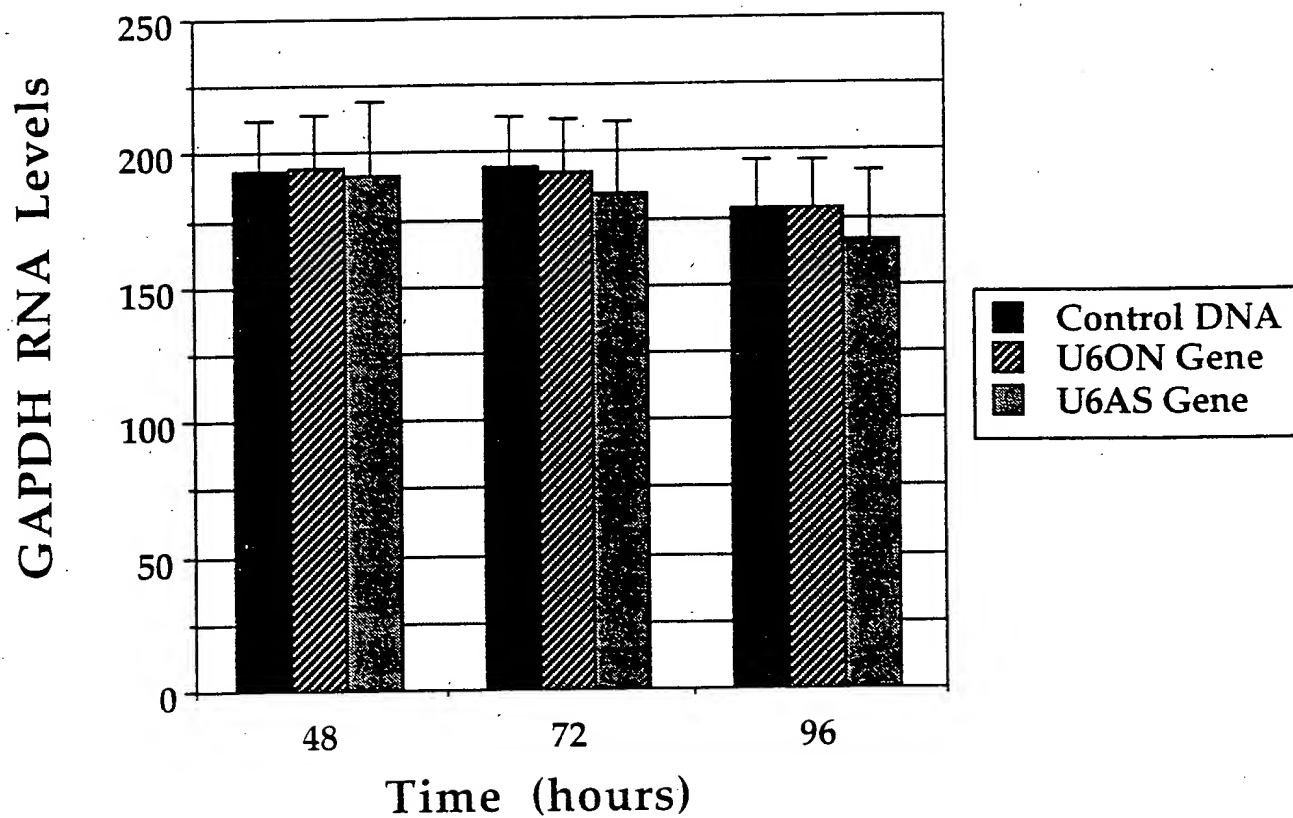


Fig. 22

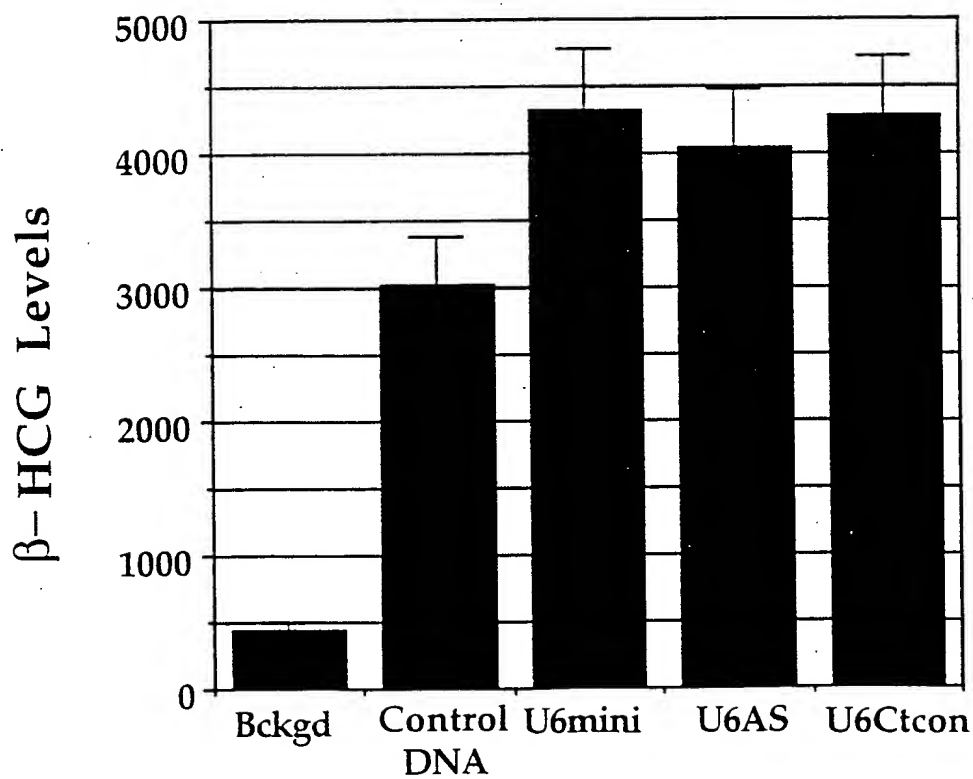
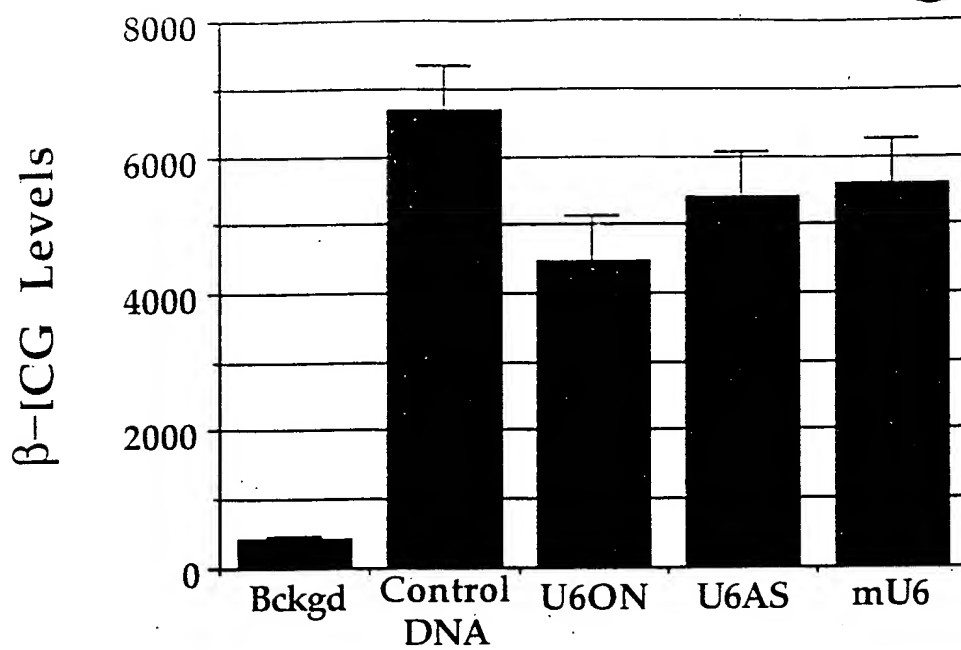


Fig. 23

-76 -34
3' GGT TAGTGT CCTCTT CCTCCTCCACCTCCTCCTCCCGACGAAC
5' CCAATCACAGGAGAAGGAGGAGGTGGAGGAGGAGGGCTGCTTG

5' UCCUCU UCCUCCUCCCCUCCUCCUCCC... CU-rich RNA
3' AGGAGAAGGAGGAGGGGGAGGAGGAGGG... GA-rich RNA
5' GGGCCCCCCCUCGAGGU CGACGGUAUCG... Control RNA

Fig. 24

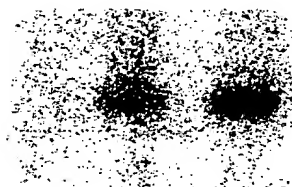
Cu-rich RNA
GA-rich RNA
Control RNA



Fig. 25

A.

0 μ g 10 μ g 20 μ g



B.

0 μ g 10 μ g 20 μ g



Fig. 26

A. U6 Parent Gene

-240	TTCCCATGAT	TCCTTCATAT	TTGCATATAC
-210	GATACAAGGC	TGTTAGAGAG	ATAATTAGAA
-180	TTAATTTGAC	TGTAAACACA	AAGATATTAG
-150	TACAAAATAC	GTGACGTAGA	AAGTAATAAT
-120	TTCTTGGGTA	GTTTGCAGTT	TTTAAAATTA
-90	TGTTTTAAAA	TGGACTATCA	TATGCTTACC
-60	GTAACCTGAA	AGTATTTCTGA	TTTCTTGGCT
-30	TTATATATCT	TGTGGAAAGG	ACGAAACACC
+1	GTGCTCGCTT	CGGCAGCACA	TATCCTCGAG
+31	CATGGCCCCT	GCGCAAGGAT	GACACGCAAA
+61	TGCATGAAGC	GTTCCATATT	TTT 83 nucleotides

B. U6ON Generator

-240	TTCCCATGAT	TCCTTCATAT	TTGCATATAC
-210	GATACAAGGC	TGTTAGAGAG	ATAATTAGAA
-180	TTAATTTGAC	TGTAAACACA	AAGATATTAG
-150	TACAAAATAC	GTGACGTAGA	AAGTAATAAT
-120	TTCTTGGGTA	GTTTGCAGTT	TTTAAAATTA
-90	TGTTTTAAAA	TGGACTATCA	TATGCTTACC
-60	GTAACCTGAA	AGTATTTCTGA	TTTCTTGGCT
-30	TTATATATCT	TGTGGAAAGG	ACGAAACACC
+1	GTGCTCGCTT	CGGCAGCACA	TATCCTCGAC
+31	TCCTCTTCCT	CCTCCACCTC	CTCCTCCCAT
+61	GCATGAAGCG	TTCCATATTT	TT 82 nucleotides

Fig. 27